

=> e vesuvin/cn

E1	1	VESUVIANITE, MANGANOAN (AL4((AL0-1FE0-1)6(MNO.8-2FE0-1.2MGO-1.2))CA19FE(OH)10(SI207)4(SI04)10)/CN
E2	1	VESUVIANITE, TITANIAN (AL4((AL0-1FE0-1)4-5.2(FE0-1MGO-1)2TI0.8-2)CA19FE(OH)2((OH)6-7.200.8-2)(SI207)4(SI04)10)/CN
E3	0 -->	VESUVIN/CN
E4	1	VESUVINE BA/CN
E5	1	VESUVINE BP/CN
E6	1	VESYCA/CN
E7	1	VESZELYITE/CN
E8	1	VESZPREMITE/CN
E9	1	VESZPREMITE (AL6F80(SI04)2)/CN
E10	1	VET/CN
E11	1	VET (EXTRACT)/CN
E12	1	VET 1/CN

=> s e4-e5

	1	"VESUVINE BA"/CN
	1	"VESUVINE BP"/CN
L1	2	("VESUVINE BA"/CN OR "VESUVINE BP"/CN)

=> d 1-2 ide can

L1 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2008 ACS on STN
 RN 8005-77-4 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN C.I. Basic Brown 1 (CA INDEX NAME)
 OTHER NAMES:
 CN Basic Brown 1
 CN Bismarck Brown
 CN Bismarck Brown B
 CN Bismarck Brown G
 CN Bismarck Brown Y
 CN C.I. 21000
 CN Conbasic Brown A
 CN Manchester Brown
 CN Verona Basic Brown 2R
 CN Vesuvine BA
 MF Unspecified
 CI MAN
 LC STN Files: AGRICOLA, BIOSIS, CA, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CIN, CSChem, MSDS-OHS, PIRA, TOXCENTER, USPAT2, USPATFULL, USPATOLD

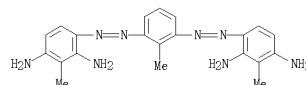
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

117 REFERENCES IN FILE CA (1907 TO DATE)
 3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 117 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 148:27532
 REFERENCE 2: 148:268343
 REFERENCE 3: 147:511105
 REFERENCE 4: 147:491674
 REFERENCE 5: 147:473820
 REFERENCE 6: 147:322259
 REFERENCE 7: 147:113375
 REFERENCE 8: 146:385729
 REFERENCE 9: 146:201112
 REFERENCE 10: 146:38149

L1 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2008 ACS on STN
 RN 6368-82-3 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN 1,3-Benzenediamine, 4,4'-[(2-methyl-3,1-phenylene)bis(azo)]bis[2-methyl-9(CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Toluene-2,6-diamine, 3,3'-[(2-methyl-m-phenylene)bis(azo)]bis- (SCI)
 OTHER NAMES:
 CN C.I. 21020
 CN Toluylene Brown
 CN Vesuvine BF
 MF C21 E24 NS
 LC STN Files: CA, CAPLUS, CHEMLIST
 Other Sources: EINECS**
 (**Enter CHEMLIST File for up-to-date regulatory information)



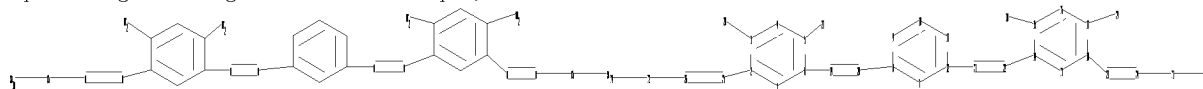
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 109:83362

=>

Uploading C:\Program Files\Stnexp\Queries\10534057.str



chain nodes :

19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

chain bonds :

2-25 3-28 5-27 6-19 8-20 12-21 14-22 15-30 17-29 18-23 19-20 21-22 23-24 24-31 25-26
26-32 31-33 32-34

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17
17-18

exact/norm bonds :

2-25 3-28 5-27 6-19 8-20 12-21 14-22 15-30 17-29 18-23 19-20 21-22 23-24 25-26

exact bonds :

24-31 26-32 31-33 32-34

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17
17-18

isolated ring systems :

containing 1 : 7 : 13 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom
13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 20:CLASS 21:CLASS 22:CLASS
23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:Atom 32:Atom
33:CLASS 34:CLASS

L2 STRUCTURE UPLOADED

=> d

L2 HAS NO ANSWERS

L2 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> => d his

(FILE 'HOME' ENTERED AT 14:50:50 ON 15 MAR 2008)

FILE 'REGISTRY' ENTERED AT 14:51:02 ON 15 MAR 2008

E VESUVIN/CN

L1 2 S E4-E5

L2 STRUCTURE UPLOADED

L3 1 S L2

L4 15 S L2 FULL

FILE 'CAPLUS' ENTERED AT 14:53:51 ON 15 MAR 2008
L5 20 S L4

=> d que 15 stat
L2 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L4 15 SEA FILE=REGISTRY SSS FUL L2
L5 20 SEA FILE=CAPLUS ABB=ON PLU=ON L4

=> d 1-20 ibib iabs hitstr

L5 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:565568 CAPLUS
 DOCUMENT NUMBER: 147:11370
 TITLE: Liquid direct dye formulations for dyeing cellulose materials, especially, paper
 INVENTOR(S): Klop, Ingo; Etzbach, Karl-Heinz; Reichelt, Helmut
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 16pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

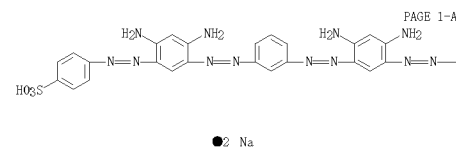
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007057370	A2	20070524	WO 2006-EP68376	20061113
WO 2007057370	A3	20070809		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AF, EA, EP, OM			

PRIORITY APPLN. INFO.: EP 2006-25196 A 20051118

ABSTRACT:
 The invention relates to aqueous liquid formulations containing 5-30% of a dye composition that comprises 25-85% of Direct brown 44, 15-75% of Direct yellow 11 and/or a dye obtained by reducing or thermally treating direct yellow 11, 0-15% of ≥ 1 Direct blue dyes, and 0-10% of ≥ 1 direct red dyes, 0.5-15% of ≥ 1 alkylamines, the one, two, or three alkyl groups of which can be substituted by one or two hydroxyl groups and/or amino groups and/or be interrupted by one or two oxygen atoms having an ether function, the Na concentration of the liquid formulation not exceeding 0.3%.

IT 6252-62-6, Direct brown 44
 RL: TEM (Technical or engineered material use); USES (Uses)
 (Liquid direct dye formulations for dyeing cellulose materials, especially, paper)

RN 6252-62-6 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)

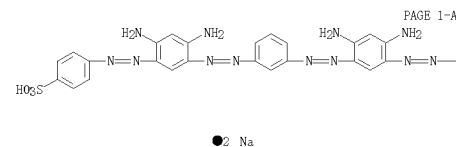


L5 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:826571 CAPLUS
 DOCUMENT NUMBER: 146:290387
 TITLE: Expression and characterization of the genes encoding azoreductases from *Bacillus subtilis* and *Geobacillus stearothermophilus*
 AUTHOR(S): Sugiura, Wataru; Yoda, Tomoko; Matsuba, Takashi; Tanaka, Yoshinori; Suzuki, Yasuhiko
 CORPORATE SOURCE: Department of Environmental Health, Osaka Prefectural Institute of Public Health, 1-6-69 Nakamichi, Higashinari-ku, Osaka, 537-0026, Japan
 SOURCE: Bioscience, Biotechnology, and Biochemistry (2006), 70(7), 1655-1665
 CODEN: BBBIEJ; ISSN: 0916-8451
 PUBLISHER: Japan Society for Bioscience, Biotechnology, and Agrochemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English

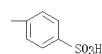
ABSTRACT:
 Azoreductases have been characterized as enzymes that can decolorize azo dyes by reducing azo groups. In this study, genes encoding proteins having homol. with the azoreductase gene of *Bacillus* sp. 0Y1-2 were obtained from *Bacillus subtilis* ATCC6633, *B. subtilis* ISW1214, and *Geobacillus stearothermophilus* IP013737 by polymerase chain reaction. All three genes encoded proteins with 174 amino acids. The deduced amino acid sequences of azoreductase homologs from *B. subtilis* ISW1214, *B. subtilis* ATCC6633, and *G. stearothermophilus* IP013737 showed similarity of 53.3, 53.9, and 53.3% resp. to that of *Bacillus* sp. 0Y1-2. All three genes were expressed in *Escherichia coli*, and were characterized as having the decolorizing activity of azo dyes in a β -NADPH dependent manner. The transformation of several azo dyes into colorless compds. by recombinant enzymes was demonstrated to have distinct substrate specificity from that of azoreductase from *Bacillus* sp. 0Y1-2.

IT 6252-62-6, Direct brown 44
 RL: BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
 (reaction with azoreductase; expression and characterization of genes encoding azoreductases from *Bacillus subtilis* and *Geobacillus stearothermophilus*)

RN 6252-62-6 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)

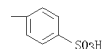


PAGE 1-B



L5 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-B



L5 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:193711 CAPLUS
 DOCUMENT NUMBER: 144:275706
 TITLE: Liquid formulations of direct dyes
 INVENTOR(S): Nordmann, Gero; Reichelt, Helmut; Klopp, Ingo;
 Schroeder, Gunter-Rudolf
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
 SOURCE: U.S. Pat. Appl., 8 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006042028	A1	20060302	US 2005-200109	20050810
US 7160336	B3	20070109		
EP 1632535	A1	20060308	EP 2005-16961	20050804
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU			EP 2004-20878	A 20040902

PRIORITY APPLN. INFO.:

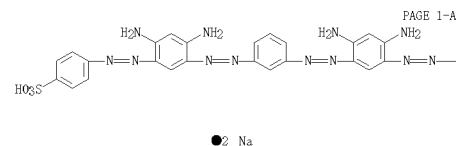
OTHER SOURCE(S): CASREACT 144:275706

ABSTRACT:

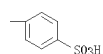
Title formulation comprises (A) 5-25% dye composition containing 20-100 Direct Yellow 11 or reducing or thermal treated Direct Yellow 11, 0-30 blue direct dye, 0-30 red direct dye, and 0-60 parts brown direct dye; and (B) 1-25% poly-N-vinylformamide and/or polymer synthesized from mixture of ethylenically unsatd. monomers (>50% of the monomers are N-vinylformamide).

IT 6252-62-6, Direct brown 44
 RL: TEM (Technical or engineered material use); USES (Uses)
 (liquid formulations of direct dyes)

RN 6252-62-6 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl](4,6-diamino-3,1-phenylene)-2,1-diazenediyl]bis-, sodium salt (1:2) (CA INDEX NAME)



PAGE 1-B



L5 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:1262726 CAPLUS
 DOCUMENT NUMBER: 144:8092
 TITLE: Method for producing a liquid formulation of salts of sulphonie-acid azo dyes
 INVENTOR(S): Schroeder, Gunter-Rudolf; Decker, Juergen; Reichelt, Helmut; Klopp, Ingo; Diefenbacher, Armin; Voss, Hartwig
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 24 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005113681	A1	20051201	WO 2005-EPE392	20050518
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 102004025443	A1	20051208	DE 2004-102004025443	20040519
EP 1756230	A1	20070228	EP 2005-745170	20050518
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1957043	A	20070502	CN 2005-80016184	20050518
MX 2006PA12950	A	20070212	MX 2006-PA12950	20061108
US 2007232795	A1	20071004	US 2006-569663	20061117
IN 2006CN04672	A	20070629	IN 2006-CN4672	20061219
PRIORITY APPLN. INFO.:			DE 2004-102004025443A	20040519
			WO 2005-EPE392	W 20050518

ABSTRACT:

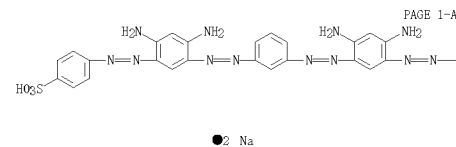
The invention relates to a method for producing a liquid formulation of salts of sulfonic-acid azo dyes by the coupling of at least an equimolar quantity of diazotized H₂NArSO₃H with products of the self-coupling products of phenylenediamine, which can be optionally substituted by Me. In said formula, Ar represents phenylene, which can be monosubstituted by sulfo, or naphthylene, which can be monosubstituted or disubstituted by sulfo and/or monosubstituted by hydroxy. According to the method, the azo dye is prepared as a basic solution without isolation of the dye, and then the solution is subjected to a nanofiltration to give a storage-stable solution. Thus, coupling of m-phenylenediamine (I) with diazotized I in water, adjusting the pH to 3 with NaOH, coupling of diazotized sulfanilic acid with the intermediate in suspension, adjusting the pH to 5 with NaOH, and adjusting the pH to 9.5 with aqueous NH₃, clarifying the solution by filtration (filtration residue <0.1%) gave a dye solution, and refiltrating the solution through a nanofiltrating membrane with the separation layer being T102, pore size being 0.9 nm, and flow rate being 20.7 kg/m² h, and concentrating the filtrate by a concentration factor of 2.13 gave a C.I. Direct Brown 44 dye solution containing 97.9% solids.

IT 6252-62-6P, C.I. Direct Brown 44
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (producing solids of salts of sulfonic-acid azo dyes with nanofiltration for purification)

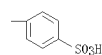
RN 6252-62-6 CAPLUS

L5 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl](4,6-diamino-3,1-phenylene)-2,1-diazenediyl]bis-, sodium salt (1:2) (CA INDEX NAME)



PAGE 1-B



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2008 ACS ON STN
 ACCESSION NUMBER: 2004:467962 CAPLUS
 DOCUMENT NUMBER: 141:25073
 TITLE: Method for producing aqueous solutions of azo dye sulfonic acid salts
 INVENTOR(S): Schmitt, Michael; Reichelt, Helmut
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 17 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004/048478	A1	20040610	WO 2003-EP12803	20031117
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RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2002/288074	A1	20040618	AU 2003-288074	20031117
EP 1567598	A1	20050831	EP 2003-779941	20031117
EP 1567598	B1	20061115		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
CN 1717454	A	20060104	CN 2003-80104446	20031117
JP 2006508209	T	20060309	JP 2004-554358	20031117
AT 345369	T	20061215	AT 2005-779941	20031117
ES 2276137	T3	20070616	ES 2003-779941	20031117
US 2006052590	A1	20060309	US 2005-534057	20050506
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			WO 2003-EP12803	W 20031117

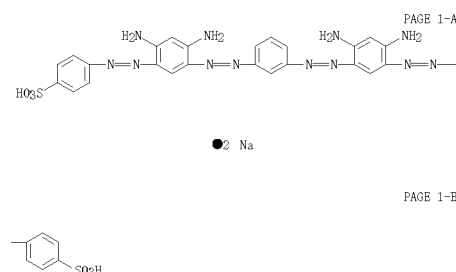
OTHER SOURCE(S): MARPAT 141:25073

ABSTRACT:
 Aqueous solution of C.I. Direct Brown 44, useful for dyeing of paper, was manufactured by (a) preparing vesuvine from *m*-phenylenediamine, (b) coupling the vesuvine without isolation with at least an equimolar quantity of diazotized aminoaryl sulfonic acid H₂NArSO₃H [Ar = (sulfo)phenylene; (OH and/or sulfo-substituted) naphthylene], and (c) isolation of the dye in acidic form and subsequent dissoln. in aqueous base. For example, the diazo component solution was prepared by dissolving 170 g sulfanilic acid in solution of 157 parts 25% aqueous NaOH in 1300 parts H₂O, adding 1300 parts ice and 335 parts of 23% aqueous NaNO₂ solution, adding 447 parts of 20% HCl and destroying the excess nitrite with sulfamic acid. The diazo component was added to the coupling component solution containing 173 parts vesuvine base in 2500 parts ice/H₂O mixture, the pH was adjusted to 5.0-6 (aqueous NaOH), after the coupling reaction was completed the pH value was lowered to pH 1 with HCl and the resulting solid was separated by filtration and dried to give 360 g C.I. Direct Brown 44 containing 1.5% NaCl. Dissolving 20 g of the wet filter cake of the above dye and 5 parts 1,2-propanediol in 72 parts diluted aqueous NaOH (pH 10-12) and clarification gave a dye solution useful for coloration of paper.

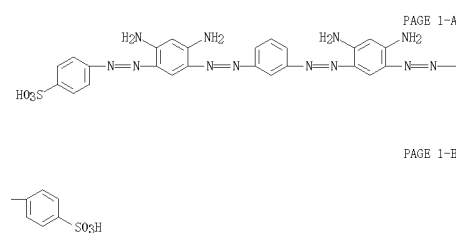
IT 6252-62-6P, Benzenesulfonic acid, 4,4'-[1,3-phenylenebis(azo(4,6-diamino-3,1-phenylene)azo)]bis-, disodium salt
 RL: IMP (Industrial manufacture); TEM (Technical or engineered material)

L5 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2008 ACS ON STN (Continued)

L5 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2008 ACS ON STN (Continued)
 use); PREP (Preparation); USES (Uses)
 (aq. soln.; method for producing aq. solns. of azo dye sulfonic acid salts)
 RN 6252-62-6 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis(2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl)]bis-, sodium salt (1:2) (CA INDEX NAME)



IT 25180-42-1P, C.I. Direct Brown 44
 RL: IMP (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (method for producing aqueous solns. of azo dye sulfonic acid salts)
 RN 25180-42-1 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis(azo(4,6-diamino-3,1-phenylene)azo)]bis- (9CI) (CA INDEX NAME)



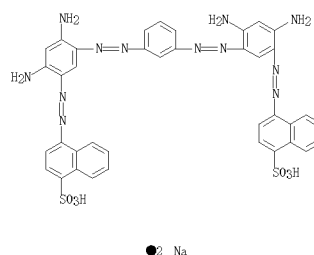
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2008 ACS ON STN
 ACCESSION NUMBER: 2003:525872 CAPLUS
 DOCUMENT NUMBER: 139:92806
 TITLE: Light-sensitive lithographic printing plate precursor containing specific visible light-absorbing dye
 INVENTOR(S): Serikawa, Takeshi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.
 CODEN: JXXXXF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003195490	A	20030709	JP 2001-399638	20011228
PRIORITY APPLN. INFO.:			JP 2001-399638	20011228

ABSTRACT:
 The title printing plate precursor has a light-sensitive layer, which contains a light-to-heat converting compound, a water-insol. alkali-solubilizable resin, and a visible light-absorbing dye having a acidic group, on a support, wherein the dye maintains the acidic group after development process. The printing plate precursor provides printing plate of high contrast between image parts and background for easy inspection of the printing plate and shows the good development characteristics.

IT 6417-95-4
 RL: TEM (Technical or engineered material use); USES (Uses)
 (visible light-absorbing dye)
 RN 6417-95-4 CAPLUS
 CN 1-Naphthalenesulfonic acid, 4,4'-[1,3-phenylenebis(azo(4,6-diamino-3,1-phenylene)azo)]bis-, disodium salt (9CI) (CA INDEX NAME)

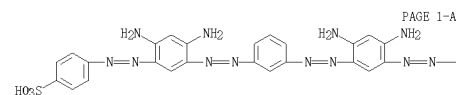


L5 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2002:886055 CAPLUS
 DOCUMENT NUMBER: 137:371581
 TITLE: Coloring paper with mixtures of dyes
 INVENTOR(S): Franken, Paul; Roick, Thomas; Landsgesel, Udo; Mueller, Heinz; Strumpf, Klaus-Guenter; Klahr, Antje; Wild, Peter; Hundertmark, Claudia; Kunde, Klaus
 PATENT ASSIGNEE(S): Bayer AG, Germany
 SOURCE: Eur. Pat. App'l., 9 pp.
 ODDEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

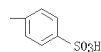
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1258562	A2	20021120	EP 2002-9340	20020503
EP 1258562	A3	20030305		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
DE 10133275	A1	20021121	DE 2001-10133275	20010709
PRIORITY APPLN. INFO.:				
			DE 2001-10123535	A 20010516
			DE 2001-10133275	A 20010709

ABSTRACT:
 In the title process, which avoids the use of C.I. Basic Brown 1, mixts. of anionic dyes with absorption maximum 390-470 nm and those with absorption maximum 560-660 nm are used. Mixing pulp from 1000 kg recycled paper with 1.2 kg C.I. Direct Brown 44 and 0.4 kg C.I. Direct Blue 199 as concentrated aqueous solns. of Na salts gave a light brown paper with good resistance to bleeding and light.

IT 25180-42-1, C.I. Direct Brown 44
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
 (coloring paper with mixts. of dyes)
 RN 25180-42-1 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis(azo(4,6-diamino-3,1-phenylene)azo)]bis- (9CI) (CA INDEX NAME)



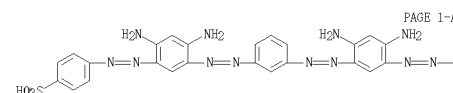
PAGE 1-B



L5 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2002:204287 CAPLUS
 DOCUMENT NUMBER: 137:141714
 TITLE: Influence of light exposure on the UV protection of direct, reactive, acid, and disperse dyes on cotton and nylon fabrics
 AUTHOR(S): Veatch, Kelly D.; Gatewood, Barbara M.
 CORPORATE SOURCE: Kansas State University, Manhattan, KS, USA
 SOURCE: AATCC Review (2002), 2(2), 47-51
 ODDEN: ARABEW; ISSN: 1532-8813
 PUBLISHER: American Association of Textile Chemists and Colorists
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ABSTRACT:

The UV protection provided by fabrics can be enhanced appreciably by use of certain dyes that absorb in the UV region. This study examined the relationships among dye fading, UV transmission, and UPF values for 82 dyes on nylon and cotton. The results of this study will assist in selecting dyes that have the greatest potential for increasing UV protection and least susceptible to change during light exposure.

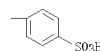
IT 6252-62-6, C.I. Direct Brown 44
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (brown dye; effect of light exposure on UV protection of direct dyes on fabrics)
 RN 6252-62-6 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



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● 2 Na

PAGE 1-B



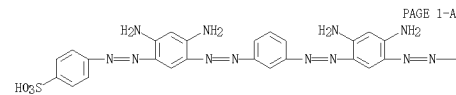
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1997:616919 CAPLUS
 DOCUMENT NUMBER: 127:512936
 TITLE: High-extinction polarizers comprising liquid crystal polymers
 INVENTOR(S): Mortazavi, Mohammad; Yoon, Hyun Nam; Teng, Chia-chi
 PATENT ASSIGNEE(S): Hoechst Celanese Corp., USA
 SOURCE: U.S., 8 pp.
 ODDEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5667719	A	19970916	US 1995-459681	19950602
JP 11506547	T	19990608	JP 1996-536525	19960520
PRIORITY APPLN. INFO.:				
			US 1995-459681	A 19950602
			WO 1996-US7274	W 19960520

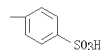
ABSTRACT:
 This invention provides high-extinction organic polarizers based on blends of novel liquid crystalline polymers and suitable dichroic dyes. The invention further provides a process to prepare such polarizers.

IT 6252-62-6, Direct Brown 44
 RL: TEM (Technical or engineered material use); USES (Uses)
 (high-extinction polarizers containing liquid crystal polymers and)
 RN 6252-62-6 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



● 2 Na

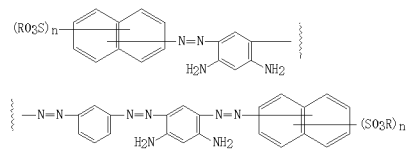
PAGE 1-B



L5 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1987:441689 CAPLUS
 DOCUMENT NUMBER: 107:41689
 TITLE: Concentrated aqueous dye solution compositions
 INVENTOR(S): Taniguchi, Koichi; Inoue, Kaname
 PATENT ASSIGNEE(S): Japan Chemical Industry Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 ODDEN: JXXXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61296069	A	19861226	JP 1985-136871	19850625
JP 07000748	B	19950111		
PRIORITY APPLN. INFO.:				
			JP 1985-136871	19850625

GRAPHIC IMAGE:

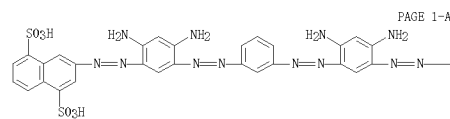


I

ABSTRACT:
 The title compns. comprise brown dyes I [R = Li, NH2 (CH2CH2OH)2, NH(CH2CH2OH)3; n = 1, 2] and water soluble polyalkylene glycols, and are useful in manufacture of paper and leather. Thus, Na naphthionate was diazotized, the diazonium salt treated with C.I. Basic Brown 1, H2O, polyethylene glycol, and urea at 10°, the pH adjusted to 8 by (HOCH2CH2)3N, and then H2O was added at 30°. This solution (A) was storage-stable for 6 mo. A pulp solution was mixed with A, a size, and anhydrous Al2(SO4)3, and was used to prepare uniformly brown paper.

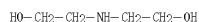
IT 109059-74-7P 109081-9S-5P
 RL: PREP (Preparation)
 (brown, manufacture of, for cellulose pulp and leather, aqueous storage-stable compns. containing)
 RN 109059-74-7 CAPLUS
 CN 1,5-Naphthalenedisulfonic acid, 3,3'-[1,3-phenylenebis[azo(4,6-diamino-3,1-phenylene)azo]]bis-, tetralithium salt (9CI) (CA INDEX NAME)

L5 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



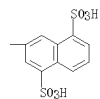
PAGE 1-A

L5 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CRN 111-42-2
CMF C4 H11 N 02

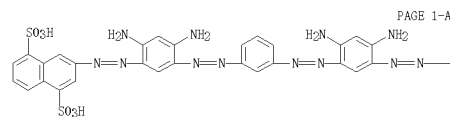
●4 Li

PAGE 1-B



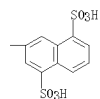
RN 109081-98-3 CAPLUS
CN 1,5-Naphthalenedisulfonic acid, 3,3'-[1,3-phenylenebis[azo(4,6-diamino-3,1-phenylene)azo]]bis-, compd. with 2,2'-iminobis[ethanol] (1:4) (9CI) (CA INDEX NAME)

CM 1

CRN 109081-97-2
CMF C38 H20 N12 O12 S4

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CM 2

L5 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

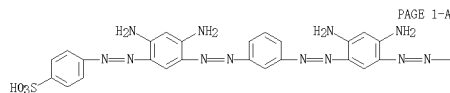
ACCESSION NUMBER: 1986:573251 CAPLUS
DOCUMENT NUMBER: 106:173251
ORIGINAL REFERENCE NO.: 106:27935a, 27938a
TITLE: Scale-preventing method in vinyl polymerization
INVENTOR(S): Koyanagi, Shunichi; Kitamura, Hajime; Shimizu, Toshihide; Kaneko, Ichiro
PATENT ASSIGNEE(S): Shin-Etsu Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKKXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61061001	A	19860313	JP 1984-171045	19840817
JP 02036602	B	19900820		
US 4758639	A	19880719	US 1987-94020	19870903
PRIORITY APPLN. INFO.:			JP 1984-171045	A 19840817
			JP 1984-171046	A 19840817
			US 1985-765803	A1 19850815

ABSTRACT:
The title method in the suspension or emulsion polymerization of vinyl monomer(s) comprises (A) reducing surface roughness of the reactor wall to <5 μm and (B) coating the reactor and auxiliary equipment of monomer contact, with dye and/or pigment. Thus, a polymerization reactor (surface roughness 0.4-0.7 μm) coated with Solvent Black 5 exhibited no scale deposit even after 150 batches of polymerization of vinyl chloride, while a control (surface roughness 0.2-0.3 μm), without such a coating, was all covered with thick scale deposit after 10 batches.

IT 6252-62-6
RL: DEV (Device component use); USES (Uses)
(coatings containing, on polymerization reactors, for prevention of scale during vinyl polymerization in aqueous media)

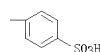
RN 6252-62-6 CAPLUS
CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



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●2 Na

PAGE 1-B



L5 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1983:476924 CAPLUS
 DOCUMENT NUMBER: 99:76924
 ORIGINAL REFERENCE NO.: 99:11813a,11816a
 TITLE: Colored shaped articles such as contact lenses
 INVENTOR(S): Suminoe, Taro; Ito, Tetsuo; Kiyomatsu, Yasuhiro;
 Shimizu, Takao
 PATENT ASSIGNEE(S): Japan Synthetic Rubber Co., Ltd., Japan; Ricky
 Contact Lens Research Institute, Inc.
 SOURCE: Bur. Pat. Appl., 24 pp.
 ODDN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 82026	A2	19830622	EP 1982-306735	19821216
EP 82026	A3	19830720		
EP 82026	B1	19870916		
R: DE, FR, GB				
JP 58104236	A	19830621	JP 1981-201450	19811216
US 4494954	A	19850122	US 1982-450040	19821215
			JP 1981-201450	A 19811216

PRIORITY APPLN. INFO.:

ABSTRACT:

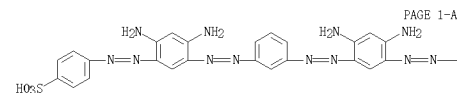
Uniformly colored shaped articles such as contact lenses are prepared by immersing an acrylate polymer in a dyeing solution containing a water-soluble dye in a solvent capable of swelling the polymer and drying the article. Discoloration or fading due to coming out of the dye is prevented by uniformly penetrating or dispersing the dye into the swollen lipophilic polymers. A polymer contact lens, prepared from acrylic acid, Bu methacrylate, and ethylene glycol dimethacrylate, was immersed in PrOH and 1% MeSO₃H was added and the mixture refluxed for 24 h to complete esterification and the lens then washed with PrOH. The lens was immersed in a MeOH solution of C.I. Acid Blue 9 (C.I. 42090) [2650-18-2] for 1 h and the swollen and colored lens dried at 95° for 16 h and washed with H₂O to remove surface dye. No discoloration occurred when the lens was boiled in distilled H₂O for 7 days.

IT 6252-62-6

RL: DIOL (Biological study)
 (acrylic contact lenses coloring with)

RN 6252-62-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis(2,1-diazenediyl)](4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



● 2 Na

L5 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:474117 CAPLUS
 DOCUMENT NUMBER: 97:74117
 ORIGINAL REFERENCE NO.: 97:12397a,12400a
 TITLE: Coloring agents for wood coatings and their properties
 AUTHOR(S): Saijo, Hiroyuki
 CORPORATE SOURCE: Kanagawa-Ken Kagu Shido Cent., Kanagawa, Japan
 SOURCE: Kogyo Toso (1980), 44, 104-117
 ODDN: KTOSDW, ISSN: 0286-6943
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 ABSTRACT:

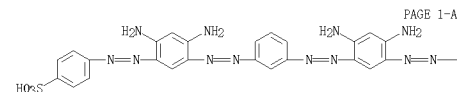
Fifty-four colorants including direct, acid, and alc.-soluble dyes and various non-grain-raising stains were applied on wood veneer specimens and subjected to fadeometer test (JIS L 0842). The results were presented as color differences as well as changes in hue, chroma, lightness, and light reflectance.

IT 6252-62-6

RL: USES (Uses)
 (lightfastness of, on wood)

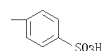
RN 6252-62-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis(2,1-diazenediyl)](4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



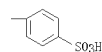
● 2 Na

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L5 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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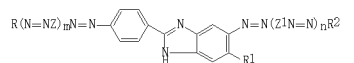


L5 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1978:512364 CAPLUS
 DOCUMENT NUMBER: 89:112364
 ORIGINAL REFERENCE NO.: 89:17366b,17367a
 TITLE: Water-soluble polyazo dyes
 INVENTOR(S): Arsac, Aime; Frank, Pierre
 PATENT ASSIGNEE(S): Produits Chimiques Ugine Kuhlmann, Fr.
 SOURCE: Fr. Demande, 30 pp.
 ODDN: FRXXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2349675	A2	19771125	FR 1976-12892	19760430
FR 2349675	B2	19790706		
PRIORITY APPLN. INFO.:			FR 1976-12892	A 19760430

GRAPHIC IMAGE:



ABSTRACT:

Polyazo dyes [I; R, R₂ = benzene, naphthalene, heterocyclic radical; R₁ = H, Cl, alkyl; Z, Z₁ = phenylene, naphthylene; m, n = 0, 1, 2; the mol. contains (in R, R₁, Z, Z₁) 1-4 SO₃H groups and 0-2 CO₂H groups] were prepared and used to dye leather. Thus, 2-(4-aminophenyl)-6-aminobenzimidazole [7621-86-6] was tetrazotized and coupled with 2-amino-6-hydroxy-7-naphthalenesulfonic acid [87-02-5] to give I (R = R₂ = 2,5,7,1-H₂N(HO)(HO₃S)C₁₀H₄, R₁ = H, m = n = 0) [67400-98-0], fast violet on leather.

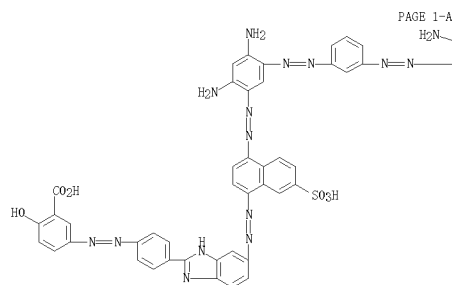
IT 67400-97-9

RL: USES (Uses)
 (dye, for leather, preparation of)

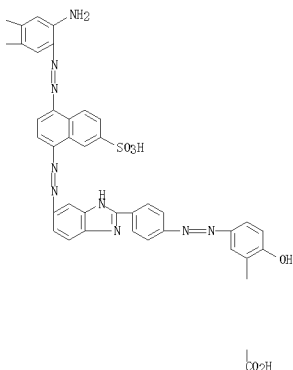
RN 67400-97-9 CAPLUS

CN Benzoic acid, 3,3'-[1,3-phenylenebis(azo(4,6-diamino-3,1-phenylene)azo(7-sulfo-4,1-naphthalenediyl)azo-1H-benzimidazole-5,2-diyl-4,1-phenyleneazo)]bis[6-hydroxy- (9CI) (CA INDEX NAME)

L5 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



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L5 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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L5 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1974:122588 CAPLUS
DOCUMENT NUMBER: 80:122588
ORIGINAL REFERENCE NO.: 80:19745a,19748a
TITLE: Ink compositions
INVENTOR(S): Miyata, Fumio
PATENT ASSIGNEE(S): Sakura Color Products Corp.
SOURCE: Ger. Offen., 46 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2317816	A1	19731018	DE 1973-2317816	19730409
DE 2317816	B3	19770421		
DE 2317816	C3	19771215		
JP 48101222	A	19731220	JP 1972-36282	19720410
JP 51039575	B	19761028		
US 3945856	A	19760323	US 1973-345050	19730406
GB 1430412	A	19760331	GB 1973-16352	19730406
FR 2179963	A1	19731123	FR 1973-12964	19730410
			JP 1972-36282	A 19720410

PRIORITY APPLN. INFO.:

ABSTRACT:

Aliphatic hydrocarbon-soluble inks, useful in marking pens, are prepared by reaction of carboxylate- or sulfonate-containing dyes with quaternary ammonium or amine salts. Thus, stirring Direct Yellow 27 [51052-88-1] 7, tributyloctylammonium chloride [51052-89-2] 8, and H2O 130 parts 20 min at 40-50 deg. gives a precipitate, purified by extraction into 100 parts PhMe to give 13 parts dye. A mixture of this product 6, pentaerythritol rosin ester 15, and refined gasoline 79 parts gives a lemon-yellow ink.

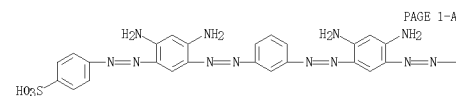
IT 6252-62-6D, Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[azo(4,6-diamino-3,1-phenylene)azo]]bis-, disodium salt, reaction products with ammonium salts

RL: USES (Uses)

(gasoline-soluble, for marking pen inks)

RN 6252-62-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



● 2 Na

L5 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1972:424512 CAPLUS
DOCUMENT NUMBER: 77:24512
ORIGINAL REFERENCE NO.: 77:4069a, 4062a
TITLE: Microbiological purification of dye-industry waste water and sewage. Minimum toxic concentrations of dyes and mordant dyes for paramacia
AUTHOR(S): Kobayashi, Hiroshi
CORPORATE SOURCE: Suisan Coll., Minist. Agric. For., Japan
SOURCE: Mizu Shori Gijutsu (1971), 12 (12), 23-30
CODEN: MSYGAO; ISSN: 0026-7015
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

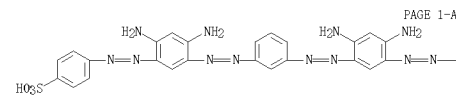
ABSTRACT:

Survival rates of Paramacium were determined as a function of concns. of 10 dyes and 2 mordants. The toxic concns. were 8-500 ppm, depending on types of dyes and mordants used.

IT 6252-62-6
RL: PRP (Properties)
(toxicity of, to Paramacium)

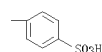
RN 6252-62-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



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L5 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1964:46215 CAPLUS
DOCUMENT NUMBER: 60:46215
ORIGINAL REFERENCE NO.: 60:8182g-h, 8183a
TITLE: Stability of direct dyes at temperatures above 100°

AUTHOR(S): Zeidman, Rita; Calin, C.; Bazavan, I.; Brenman, Simona; Grindea, Misilim
CORPORATE SOURCE: Polytech. Inst., Iasi, Rom.
SOURCE: Buletinul Institutului Politehnic din Iasi (1962), 8(3-4), 445-50
CODEN: BUPIAB; ISSN: 0032-6100

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

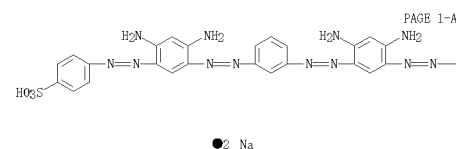
ABSTRACT:

The behavior of 48 direct dyes at >100° was investigated. Modifications in the spectral characteristics (CA 57, 6069h) and results of actual dyeing of cotton fibers in neutral (0.5 and 1 h.) and in alkaline (4% Na₂CO₃, 0.5 h.) media were determined in the presence of 10% Na₂SO₄-all at normal temperature and at 120°. The heat resistance of the dyes was lower in alkaline than in neutral media. In the latter, the heat resistance of the direct dyes was remarkable, only Direct Brilliant Orange and Direct Resistant Ruby L2A being unusable. The results showed that the benzidine disazo and the stilbene dyes have remarkable heat resistance, while the dyes derived from the carbonyl J acid have a lower stability. In general, stability of the dyes was the same when heated in the absence or in the presence of cotton, but in some cases the heat resistance was improved by the cotton. The role of the secondary dyes in the final behavior of the products examined was also discussed.

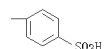
IT 6252-62-6, C.I. Direct Brown 44
(heat stability of)

RN 6252-62-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl](4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



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L5 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1966:38396 CAPLUS
DOCUMENT NUMBER: 50:38396
ORIGINAL REFERENCE NO.: 50:7453f-h
TITLE: Paper chromatography of reduction products of dyes from benzidine and its derivatives

AUTHOR(S): Kitahara, Shinya; Hiyama, Hachiro
CORPORATE SOURCE: Osaka City Ind. Research Inst.
SOURCE: Kogyo Kagaku Zasshi (1965), 68, 620-5
CODEN: KOKZAT; ISSN: 0068-5462

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

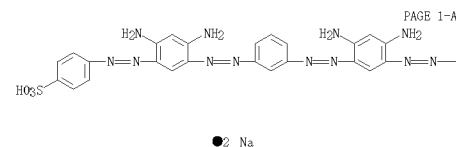
ABSTRACT:

cf. C.A. 49, 14327d. Twenty-seven kinds of benzidine dyes were subjected to acid reduction with tin chloride and examined by paper chromatog. by use of FeCl₃ or NH₄OH as coloring reagent and BuOH-HCl (4:1) mixture or 5% HCl aqueous solution as developing agent. The color and R_F values of reduction products are tabulated. The names of dyes examined are: Congo red, Benzopurpurin 4B, Direct Blue 2B, Diamine Sky Blue, Direct Violet RN, Acetopurpurine 8B, Coupling Orange Extra, Pyramine Orange R, Toluyene Orange G, Fast Red F, Benzo Orange R, Direct Brown M, Direct Red G, Benzo Fast Red G1, Congo Orange R, Benzo Brown CB, Congo Corinth G, Brilliant Bordeaux NS, Direct Black BA, Dia Mineral Blue CVB, Congo Rubin, Direct Brown 3G, Direct Green G, Direct Dark Green, Congo Brown G, Direct Fast Black HW, Deep Black Extra.

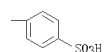
IT 6252-62-6, Direct Brown 3G
(chromatog. of reduction products of)

RN 6252-62-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl](4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



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L5 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

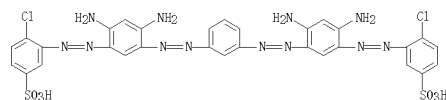
ACCESSION NUMBER: 1961:67667 CAPLUS
DOCUMENT NUMBER: 55:67667
ORIGINAL REFERENCE NO.: 55:12857e-f
TITLE: Improvement of the quality of direct dyes
AUTHOR(S): Légradi, Laszlo; Kovacs, Tibor
CORPORATE SOURCE: Veszprem County Dye Factory, Fuzfogyartelep, Hung.
SOURCE: Magyar Kemiai Polyoirat (1961), 67, 1-3
CODEN: MGKPA3; ISSN: 0025-0155

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

The structure of Dianil Brown (C. I. Direct Brown 44) was altered by using 1-chloro-2-amino-4-benzenesulfonic acid (I) in the place of sulfanilic acid. I was prepared in 90% yield by sulfonating and nitrating chlorobenzene, followed by reduction. Light-fastness was improved, other fastness values remained the same.

IT 117881-07-9F, Benzenesulfonic acid, 3,3'-[m-phenylenebis[azo(4,6-diamino-m-phenylene)azo]]bis[4-chloro-
RL: PREP (Preparation)
(preparation of)
RN 117881-07-9 CAPLUS
CN Benzenesulfonic acid, 3,3'-[m-phenylenebis[azo(4,6-diamino-m-phenylene)azo]]bis[4-chloro- (6CI) (CA INDEX NAME)



L5 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1947:3579 CAPLUS
DOCUMENT NUMBER: 41:3579
ORIGINAL REFERENCE NO.: 41:724e-1,725a-d
TITLE: Azo compounds and their intermediates. XXVIII. The structure of toluylene brown G

AUTHOR(S): Ruggli, Paul; Fischer, Roland
CORPORATE SOURCE: Univ. Basel
SOURCE: Helvetica Chimica Acta (1945), 28, 445-50
CODEN: HCACAV; ISSN: 0018-019X

DOCUMENT TYPE: Journal

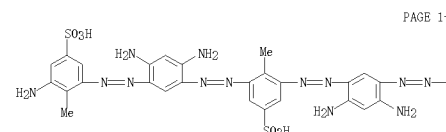
LANGUAGE: German

GRAPHIC IMAGE: For diagram(s), see printed CA Issue.

ABSTRACT:

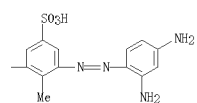
cf. C.A. 40, 4037.1. Toluylene brown G (I), to which has been ascribed the formula (II), is prepared in the usual manner by coupling m-CEH₄(NH₂)₂ (IV) with tetrazotized 3,5-diamino-p-toluenesulfonic acid (V) and found to have an atomic ratio N:S of 6:0.99, verifying the equimolar ratio demanded by the formula. However, II contains a heterocyclic 10-membered ring which is improbable from theoretical considerations. Diffusion expts. indicate that I is an ion-colloid rather than a simple mol. Therefore, a chain structure (III) seems more probable than a ring configuration. Reductive splitting would not clarify the problem because either structure would yield the same products. Blocking one of the amino groups of V by acetylation to form monoacetyl-3,5-diamino-p-toluenesulfonic acid (VI), C₉H₁₂O₄N₂S.2H₂O, followed by diazotization, produces a compound which couples with IV to yield a brick-red monoazo dye (VII) which on hydrolysis with 5% NaOH for 6 hrs. gives the brown dye (VIII). VIII ("opentoluylene brown") is not a substantive dye but has the characteristics of a wool dye. VIII does become substantive when it is converted into a disazo dye by the addition of another mol. of IV to produce (IX) (Phd.N₂.Tds.N₂.Phd) [Phd = phenylenediamine residue;Tds = diaminotoluenesulfonic acid residue]. Coupling of diazotized VI with VIII produces a mono-Ac disazo dye (X) (AcTds.N₂.Phd.N₂.Tds). Diazotization of X followed by coupling with IX gives a compound which on deacetylation yields a pentakisazo dye (XI) (Tds.N₂.Phd.N₂.Tds.N₂.Phd.N₂.Tds.N₂.Phd). Thus XI is III with a definite chain length. The phys. and chemical properties of I are very much like those of XI, confirming the chainlike structure assigned to it.

IT 859493-74-6F, p-Toluenesulfonic acid, 3-[2,4-diamino-5-(3-amino-5-sulfo-o-tolylazo)phenylazo]-5-[2,4-diamino-5-[3-(2,4-diaminophenylazo)-5-sulfo-o-tolylazo]phenylazo]-
RL: PREP (Preparation)
(preparation of)
RN 859493-74-6 CAPLUS
CN p-Toluenesulfonic acid, 3-[2,4-diamino-5-(3-amino-5-sulfo-o-tolylazo)phenylazo]-5-[2,4-diamino-5-[3-(2,4-diaminophenylazo)-5-sulfo-o-tolylazo]phenylazo]- (6CI) (CA INDEX NAME)



L5 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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L6	182	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"SCHMITT MICHAEL"/AU
L7	135	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"REICHELTL HELMUT"/AU
L8	315	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L6 OR L7
L9	1	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L8 AND (VESUVIN? OR (BISMARCK BROWN))

=> d bib abs

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2004:467962 CAPLUS
 DN 141:25073
 TI Method for producing aqueous solutions of azo dye sulfonic acid salts
 IN Schmitt, Michael; Reichelt, Helmut
 PA BASF Aktiengesellschaft, Germany
 SO PCT Int. Appl., 17 pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004048478	A1	20040610	WO 2003-EP12803	20031117
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, ME, MG, MN, MW, MX, MY, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, NG, TD, TG				
AU 2003288074	A1	20040618	AU 2003-288074	20031117
EP 1567598	A1	20050831	EP 2003-779941	20031117
EP 1567598	B1	20061115		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CH, AL, TR, BG, CZ, EE, HU, SK				
CN 1717454	A	20060104	CN 2003-80104446	20031117
JP 2006508209	T	20060309	JP 2004-554358	20031117
AT 345369	T	20061215	AT 2003-779941	20031117
ES 2276137	T3	20070616	ES 2003-779941	20031117
US 2006052590	A1	20060309	US 2005-534057	20050506
PRAI EP 2002-26581	A	20021128		
WO 2003-EP12803	W	20031117		

OS MARPAT 141:25073
 AB Aqueous solution of C.I. Direct Brown 44, useful for dyeing of paper, was manufactured by (a) preparing vesuvine from m-phenylenediamine, (b) coupling the vesuvine without isolation with at least an equimolar quantity of diazotized aminoaryl sulfonic acid $\text{H}_2\text{NArSO}_3\text{H}$ [Ar = (sulfo)phenylene; (OH and/or sulfo-substituted) naphthylene], and (c) isolation of the dye in acidic form and subsequent dissoln. in aqueous base. For example, the diazo component solution was prepared by dissolving 170 g sulfanilic acid in solution of 157 parts 25% aqueous NaOH in 1300 parts H₂O, adding 1300 parts ice and 335 parts of 25% aqueous NaNO₂ solution, adding 447 parts of 20% HCl and destroying the excess nitrite with sulfamic acid. The diazo component was added to the coupling component solution containing 173 parts vesuvine base in 2500 parts ice/H₂O mixture, the pH was adjusted to 5.0-6 (aqueous NaOH), after the coupling reaction was completed the pH value was lowered to pH 1 with HCl and the resulting solid was separated by filtration and dried to give 360 g C.I. Direct Brown 44 containing 1.5% NaCl. Dissolving 20 g of the wet filter cake of the above dye and 6 parts 1,2-propanediol in 72 parts diluted aqueous NaOH (pH 10-12) and clarification gave a dye solution useful for coloration of paper.

RE CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

126.35

331.90

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-16.80

-16.80

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 14:58:50 ON 15 MAR 2008